effectively target interventions to improve arthritis management in the Medicare managed care population.

PMS79

THE USE OF ADVANCED REPORTING INTEGRATING BIG DATA (COREREPORTS): THE CASE OF OSTEOPOROSIS

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OBJECTIVES: To describe prevalence and to evaluate pattern of use and sanitary costs of patients treated with osteoporosis drugs, using advanced reporting tools and methodologies integrating Big Data (coreReports) **METHODS:** Starting from ARNO Observatory, an Italian Database that collects health data on a population of 13 million Italian citizens, a new automated analytical tools (CoreReports) has been developed in order to manage, catalog and find the strategic indicators of healthcare costs and patients care pathways related to Diseases, Populations, Drugs with benchmarking among different geographical areas. All web-based Reports are automatically generated on-the-fly according to analytical needs and validated by a Scientific Committee with experts in various diseases. Among different diseases some results related to osteoporosis will be presented. **RESULTS:** Of the 5,364,167 subjects over 40 years, 176,831 (prevalence 3.3%) were treated with osteoporosis drugs with the following pattern of use: bisphosphonates (80%), strontium ranelatum (18%), parathyroid hormone (1.2%), SERMs (0.8%), denosumab (0.4%). A considerable percentage (21.8%) didn't received vitamin D supplements in association. Patients with osteoporosis received many drugs expression of comorbidity (cardiovascular drugs 67% of patients, corticosteroids 25%, nervous system drugs 33%). More than 1/6 of patients were hospitalized during 2012 (fractures 2,2%). Less than 50% of patients controlled their serum calcium levels in the last three years, 34% performed a densitometry. The average yearly cost/patient is 2.332€, 37% due to drugs (30% specific drugs, 70% others), 45% due to hospitalization and 18.8% to lab tests and diagnostic examinations. **CONCLUSIONS:** Osteoporosis represents a condition of high epidemiological prevalence and with a strong impact on the social welfare, on prevention and on pharmaceutical costs. A big data infrastructure represents a tool to evaluate patient care pathways with osteoporosis and estimate cost of illness and can be a valid instrument to support clinical governance

PMS80

PATIENT CHARACTERISTICS ASSOCIATED WITH PASSING OR FAILING THE HEDIS MEASURE FOR POST-FRACTURE OSTEOPOROSIS MANAGEMENT

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OBJECTIVES: Despite an estimated 2 million osteoporosis (OP)-related fractures occurring annually, achievement of post-fracture OP quality measures is low. In 2013, the national average pass rate on the Healthcare Effectiveness Data and Information Set (HEDIS) measure "Osteoporosis Management in Women who had a Fracture" was 23%. This study has sought to identify characteristics associated with success or failure in meeting the current OP HEDIS measure. **METHODS:** Women were included if they were between 67-85 years (yrs) of age, had ≥1 fracture from July 2011 to December 2013 (index date = earliest encounter), and were continuously enrolled in a Humana Medicare Advantage with Prescription Drug coverage (MAPD) plan for at least 12 months pre-index and 6 months post-index. Patients were excluded if they had a BMD (bone mineral density) test or OP treatment pre-index. Descriptive statistics were compiled for the following variables: age, race, geographic region, and insurance type. **RESULTS:** The sample included 52,864 women. Mean age among the 17,952 (34%) patients who "passed" and the 34,912 (66%) who "failed" the HEDIS measure was 76.3 yrs and 76.1 yrs respectively (p=0.0003). A higher percentage of black women were in the "failed" group (6.2% failed vs. 5.4% passed; p<0.0001), while Hispanic women were more prevalent in the "passed" group (3.0% passed vs. 1.3% failed; p<0.0001). A larger proportion of patients residing in the Midwest were in the "failed" group (27.3% failed vs. 19.3% passed; p<0.0001), along with those in suburban (26.5% failed vs. 19.6% passed; p<0.0001) and rural (12.5% failed vs. 7.8% passed; p<0.0001) areas. A greater fraction of women who "passed" the measure (69.9% passed vs. 60.6% failed; p<0.0001) resided in the South. **CONCLUSIONS:** Preliminary results identify characteristics of women with OP who are receiving suboptimal care. Further analyses could enable targeting of at-risk women to improve post-fracture OP management.

PMS81

RELATIONSHIP BETWEEN PHYSICIAN ASSESSMENT OF DISEASE SEVERITY (PER CLINICAL JUDGMENT) AND OBJECTIVE MEASURES OF DISEASE SEVERITY IN RHEUMATOID ARTHRITIS (RA): OBSERVATIONS FROM THE EUROPEAN UNION (EU) AND UNITED STATES (US)

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OBJECTIVES: To evaluate the relationship between physician-assessment (per clinical judgment) and objective measures for disease severity assessments among RA patients in the EU and US. **METHODS:** A multi-country multi-center medical chart-review study of RA patients was conducted in 4Q2011 among physicians (majority: rheumatologists) in hospitals/private practices to collect de-identified data on patients who were recently treated with a biologic as part of usual care. Physicians were screened for practice-duration and patient-volume and recruited from a large panel to be geographically representative in the EU (UK/Germany/France/Italy/Spain) and US. For successive patients visiting each center/practice during study period, physicians abstracted patient diagnosis, treatment patterns/dynamics and patient symptomatology/disease status incl. physician-assessment of disease severity (rated as mild/moderate/severe, per clinical judgment). **RESULTS:** In EU and US, 2208 and 851 patient charts were abstracted respectively; majority of the patients were on the 1st-line biologic (EU:74%; US:70%) while 20% and 23% respectively in EU and US were on 2nd-line biologic. Per physician-assessment, 49%/41%/9% were mild/moderate/severe in EU and 59%/35%/6% were mild/moderate/severe in US. Among those with available data, recent disease severity scores increased with increasing Physician-assessment-based severity level in both EU and US (mean values for mild/moderate/severe): Tender Joint Count - EU:2.5/5.3/7.4 vs. US:2.3/6.6/8.9; Swollen Joint Count - EU:1.3/3.6/5.3 vs. US: 1.5/5.0/6.7; 100mm VAS Score - EU:19.8/38.9/51.4 vs. US:17.2/47.0/48.6; HAQ Score - EU:0.8/1.4/1.5 vs. US:0.7/1.4/1.9; DAS28 score - EU:2.6/4.1/5.1 vs. US:2.5/4.0/5.3; Total Sharp Score - EU: 2.4/2.1/4.0 vs. US:3.1/2.3/7.0. Person correlation coefficient (r) comparing PGA (mild:1, modearate:2, severe:3) to individual objective disease severity measures were in the range of 0.79-1.00 in EU and 0.77-1.00 in US. **CONCLUSIONS:** Across the geographies, physician-assessment (per clinical judgment) strongly correlated with the objective measures of disease severity among RA patients, further strengthening the argument towards continued inclusion/use of simple physician-assessment scales in usual care practices around the world.

PMS82

COMPARISON OF PATIENTS WITH RHEUMATOID ARTHRITIS (RA) ON DISEASE REMISSION IN THE EUROPEAN UNION (EU) AND UNITED STATES (US)

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OBJECTIVES: To compare RA patients on disease remission in the EU and US among those receiving a biologic treatment as part of usual care. **METHODS:** A multi-country multi-center medical chart-review study of RA patients was conducted in 4Q2011 among physicians (majority: rheumatologists) in hospitals/private practices to collect de-identified data on patients who were recently treated with a biologic as part of usual care. Physicians were screened for practice-duration and patient-volume and recruited from a large panel to be geographically representative in the EU (UK/Germany/France/Italy/Spain) and US. For each study-eligible patient chart, physicians abstracted patient diagnosis, treatment patterns/dynamics and patient symptomatology/disease status (incl. assessment of 'disease remission', per physician clinical judgment (both objective & subjective)). Patients on disease remission were analyzed. **RESULTS:** Analysis included 1161 and 405 patients experiencing disease remission in the EU and US respectively; 75% (vs. 74%), 20% (vs. 22%) and 5% (vs. 4%) were on 1st line, 2nd line and >=3rdline biologic respectively in the EU (vs. US). Mean duration in remission was: EU-12.2mo vs. US-12.1mo. Among those with lab measures, results were mostly similar between patients in remission in the EUvs.US: mean ESR(mm/h): 17.0vs.18.9, mean CRP(mg/dl): 7.0vs.1.6, Rheumatoid Factor (% positive): 83%vs.87% and Anti-CCP (% positive): 75%vs.74%. Among those with available data, recent (mean) disease severity scores were also similar between patients in remission in the EUvs.US: Tender Joint Count: 2.3vs.1.7, Swollen Joint Count: 1.2vs.0.8, 100mm VAS score: 18.6vs.18.9, HAQ: 0.7vs.0.6 and DAS28: 2.6vs.2.2. **CONCLUSIONS:** This is one of the first studies to compare RA patients in remission in the EU and US; the characteristics of these RA patients in remission were found mostly similar between these geographic clusters, despite the potential variations in healthcare systems and modalities of care delivery, possibly attributed by ACR/EULAR efforts in standardizing the outcome definitions and care delivery.

PMS83

PATTERNS OF DISEASE REMISSION AMONG PATIENTS WITH RHEUMATOID ARTHRITIS TREATED WITH BIOLOGIC THERAPIES IN JAPAN

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OBJECTIVES: To assess the patterns of disease remission among Rheumatoid Arthritis (RA) patients recently treated with biologic therapies in Japan. **METHODS:** A multi-center medical chart-review study of RA patients was conducted among physicians (rheumatologists) in hospitals/private practices to collect de-identified data on patients who were currently on a biologic or recently discontinued a biologic within past 3-months. Physicians were screened for practice-duration and patient-volume and recruited from a large panel to be geographically representative of Japan. Patient charts of ~10 successive patients visiting each center/practice during study period were selected. Physicians abstracted patient diagnosis, treatment patterns/dynamics and patient symptomatology/disease status (incl. assessment of 'disease remission', per physician clinical judgment (both objective & subjective)). **RESULTS:** In 4Q2011, physicians abstracted 435 eligible RA patient charts; 79%, 17%and 3% were on 1st line, 2nd line and 3rd line biologic respectively. Overall, 49% of patients were in remission; the mean duration of remission status was 16.7 months. Remission-rate differed by biologic lines: 1st-line:53%, 2nd-line:41%, 3rd-line:21%. Among those with lab measures, results differed between those in remission vs. those who were not: mean ESR(mm/h): 18.1vs.30.6, mean CRP(mg/dl): 0.5vs.1.2, mean MMP3(ng/ml): 84.7-vs-136.7, Rheumatoid Factor (% positive): 87%-vs-91% and Anti-CCP (% positive): 91%-vs-94%. Among those with available data, recent (mean) disease severity scores differed between those in remission vs. those who were not: Tender Joint Count: 0.8-vs-2.7, Swollen Joint Count: 0.8-vs-2.6, 100mm VAS score: 12.8-vs-32.2, HAQ: 0.1-vs-0.2 and DAS28: 1.8-vs-3.7. **CONCLUSIONS:** Approximately half of the patients were not in remission in this cohort of RA patients in Japan who were treated with a biologic; they experienced disproportionate level of disease burden. As the line of treatment increased, proportion of individuals achieving remission decreased. These observed patterns warrant further scrutiny to determine the best practices and improve remission rates, thereby alleviating patient burden.

PMS84

COMPARISON OF CLINICAL CHARACTERISTICS OF PATIENTS WITH RHEUMATOID ARTHRITIS (RA) IDENTIFIED BY PHYSICIANS AS POTENTIALLY SUITABLE FOR BIOSIMILAR INFLIXIMAB VERSUS THOSE WHO WERE NOT CONSIDERED BIOSIMILAR INFLIXIMAB SUITABLE IN EUROPE (EU)

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